CptnFabulous — Yesterday at 4:42 PM

So I'm pretty new to AR and experimenting with stuff, but I'm trying to figure out better tips for making my AR objects feel like real parts of the world. Presently if I spawn something in it just feels like an overlay on top of the real world (even though that's obviously what's happening) rather than a part of it. It's pretty dodgy for immersion. What tricks do you guys use?

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SolidAlloy — Yesterday at 7:23 PM

You can get different information about light from ARCameraManager and use it to light up your virtual objects realistically. The information you can get includes light intensity, direction, color. What kind of information you can get depends on a specific device. For example, iOS devices don't report light direction when using back camera. Some devices can even provide you with environment probes, so you can get proper reflections on virtual objects.

Some videos to get you started (although some details in them are outdated, I believe the general concept hasn't changed):

https://youtu.be/nw6-U\_mSvQQ

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CptnFabulous — Yesterday at 8:36 PM

Ooh, I was thinking from a 3D space perspective, but adjusting the lighting accordingly would absolutely help! I'll have to look at those links, thanks!

[8:37 PM]

I know I've seen code to have the device somehow check if something visible through the camera has space behind it, and if the mesh's position is partially obscured it'll realistically only render part of the object

[8:39 PM]

I still want to find out how to do that

[8:39 PM]

I saw a pokemon demo with a tiny AR Pikachu running behind a chair

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SolidAlloy — Yesterday at 11:29 PM

Ah yes, it's called occlusion in AR Foundation, there is a little bit of info on it here https://docs.unity3d.com/Packages/com.unity.xr.arfoundation@5.0/manual/arsubsystems/occlusion-subsystem.html

This feature is mainly controlled by the AR Occlusion Manager component. Note, however, that just like the light estimation functionality, the particular features you can enable with AR Occlusion are very dependent on the platform the application is run on (iOS, Android) and on a specific device. iOS devices with LIDARs are particularly efficient at this task while other devices have noticeable glitches in occlusion here and there.